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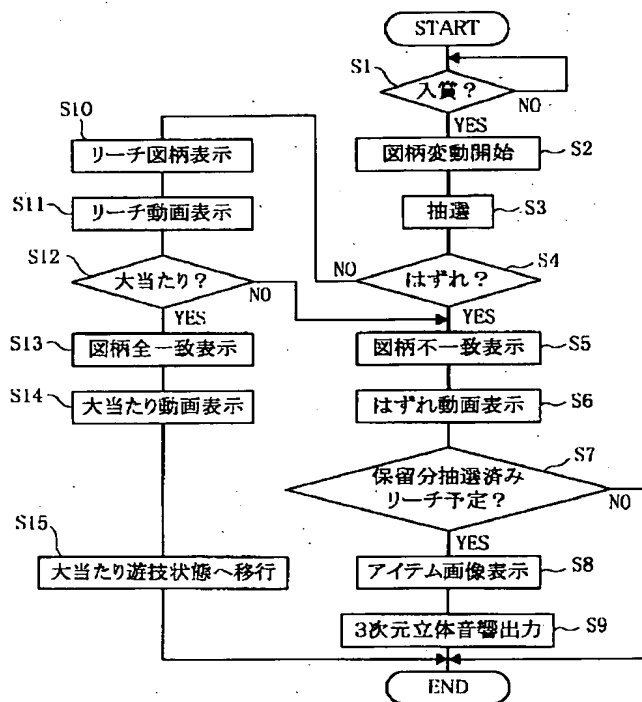
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CLAIMS

[Claim(s)]

[Claim 1] The game machine characterized by having the control means to which the 3-dimensional stereophonic sound which is the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least, is interlocked with change of the aforementioned background image and changes is made to output.

[Claim 2] The game machine characterized by to have a gang control means interlock a display-control means to be the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least, and to change the aforementioned background image, a sound output means to output sound, the 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from the aforementioned sound output means, and change of the aforementioned background image and change of the aforementioned 3-dimensional stereophonic sound.

[Claim 3] when reporting the omen of change of a game situation, the aforementioned display-control means changes the aforementioned background image to a predetermined background image — making — the movement of a background image predetermined [the aforementioned sound-output means to / aforementioned] in the aforementioned 3-dimensional stereophonic-sound control means — doubling — ***** — the game machine according to claim 2 with which make the aforementioned 3-dimensional stereophonic sound [like] output, and the aforementioned gang-control means controls the timing which changes to the aforementioned predetermined background image, and the timing to which the aforementioned 3-dimensional stereophonic sound makes output

[Claim 4] The control method of the game machine characterized by making the 3-dimensional stereophonic sound which is the control method of a game machine of having the display screen which displays the dynamic image which includes a background image and a character picture at least, is interlocked with change of the aforementioned background image and changes output.

[Claim 5] The control method of the game machine which is the control method of a game machine of having the display screen which displays the dynamic image which includes a background image and a character picture at least, and is characterized by interlocking operation to which the aforementioned background image is changed, and operation which carries out output change of the 3-dimensional stereophonic sound from a sound output means.

[Claim 6] the timing which changes the aforementioned background image to a predetermined background image when reporting the omen of change of a game situation, and the movement of this predetermined background image — doubling — ***** — the control method of the game machine according to claim 5 which

controls the timing to which the aforementioned 3-dimensional stereophonic sound [like] is made to output

[Claim 7] When a game person accesses the aforementioned server from the aforementioned terminal unit including the terminal unit of the arbitrary number which can communicate bidirectionally through a communication network between a server and this server It is the communication game system by which an imagination game machine is displayed on the display of the aforementioned terminal unit, and the game by the aforementioned game machine is performed based on operation of the aforementioned terminal unit by the game person. The imagination display screen which displays the dynamic image which includes a background image and a character picture in the aforementioned game machine at least is made to have. The communication game system characterized by preparing the control means which make the 3-dimensional stereophonic sound which is interlocked with change of the aforementioned background image and changes output to the aforementioned terminal unit in the aforementioned server or the aforementioned terminal unit.

[Claim 8] When a game person accesses the aforementioned server from the aforementioned terminal unit including the terminal unit of the arbitrary number which can communicate bidirectionally through a communication network between a server and this server It is the communication game system by which an imagination game machine is displayed on the display of the aforementioned terminal unit, and the game by the aforementioned game machine is performed based on operation of the aforementioned terminal unit by the game person. A display-control means to make the aforementioned game machine equipped with the imagination display screen which displays the dynamic image which includes a background image and a character picture at least, and to change the aforementioned background image to it, The communication game system characterized by preparing a gang control means to interlock the 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from the sound output means prepared in the aforementioned terminal unit, and change of the aforementioned background image and change of the aforementioned 3-dimensional stereophonic sound in the aforementioned server or the aforementioned terminal unit.

[Claim 9] When reporting the omen of change of a game situation, the aforementioned display-control means changes the aforementioned background image to a predetermined background image. The aforementioned 3-dimensional stereophonic sound [like] is made to output. the movement of a background image predetermined [the aforementioned sound output means to / aforementioned] in the aforementioned 3-dimensional stereophonic sound control means — doubling —
 ***** — The communication game system according to claim 8 by which the aforementioned gang control means controls the timing changed to the aforementioned predetermined background image, and the timing to which the aforementioned 3-dimensional stereophonic sound is made to output.

[Claim 10] Communication is bidirectionally made possible through a communication

network between terminal units, and an imagination game machine is displayed on the display of the aforementioned terminal unit. While having the imagination display screen which displays the dynamic image which includes a background image and a character picture in the game machine at least. The server characterized by having a starting means to be the server which manages the game situation in the aforementioned terminal unit that the 3-dimensional stereophonic sound which is interlocked with change of the aforementioned background image and changes is outputted, and to start the predetermined function of the terminal unit according to access from the aforementioned terminal unit.

[Claim 11] The server characterized by providing the following. A display-control means to change the aforementioned background image while having the imagination display screen which communication is bidirectionally made possible through a communication network between terminal units, and an imagination game machine is displayed on the display of the aforementioned terminal unit, and displays the dynamic image which includes a background image and a character picture in the game machine at least. A sound output means to output sound. 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from the aforementioned sound output means. A starting means to be the server which manages the game situation in the aforementioned terminal unit that a game is performed using a gang control means to interlock change of the aforementioned background image, and change of the aforementioned 3-dimensional stereophonic sound, and to start the predetermined means of the terminal unit according to access from the aforementioned terminal unit.

[Claim 12] When reporting the omen of change of a game situation, the aforementioned starting means starts the aforementioned display-control means, and changes the aforementioned background image to a predetermined background image. The aforementioned 3-dimensional stereophonic sound [like] is made to output. the aforementioned 3-dimensional stereophonic sound control means are started — making — the movement of a background image predetermined [the aforementioned sound output means to / aforementioned] — doubling — ***** — The server according to claim 11 which controls the timing which is made to start the aforementioned gang control means and is changed to the aforementioned predetermined background image, and the timing to which the aforementioned 3-dimensional stereophonic sound is made to output.

[Claim 13] The computer program characterized by including the control program for making the 3-dimensional stereophonic sound which is a computer program for controlling the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least, is interlocked with change of the aforementioned background image and changes output.

[Claim 14] It is a computer program for controlling the game game by which an imagination game machine is displayed on display and the game by the

aforementioned game machine is performed based on operation by the game person. The imagination display screen which displays the dynamic image which includes a background image and a character picture in the aforementioned game machine at least is made to have. The computer program characterized by including the control program for making the 3-dimensional stereophonic sound which is interlocked with change of the aforementioned background image and changes output to a sound output means.

[Claim 15] The computer program which is a computer program for controlling the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least, and is characterized by to include the gang-control program for interlocking the display-control program for changing the aforementioned background image, the 3-dimensional stereophonic-sound control program for making 3-dimensional stereophonic sound output from a sound output means to output sound, and change of the aforementioned background image and change of the aforementioned 3-dimensional stereophonic sound.

[Claim 16] It is a computer program for controlling the game game by which an imagination game machine is displayed on display and the game by the aforementioned game machine is performed based on operation by the game person. The display-control program for making the aforementioned game machine equipped with the imagination display screen which displays the dynamic image which includes a background image and a character picture at least, and changing the aforementioned background image to it, The computer program characterized by including the gang control program for interlocking the 3-dimensional stereophonic sound control program for making 3-dimensional stereophonic sound output from a sound output means to output sound, and change of the aforementioned background image and change of the aforementioned 3-dimensional stereophonic sound.

[Claim 17] When reporting the omen of change of a game situation, the aforementioned display-control program changes the aforementioned background image to a predetermined background image. The aforementioned 3-dimensional stereophonic sound [like] is made to output. the movement of a background image predetermined [the aforementioned sound output means to / aforementioned] in the aforementioned 3-dimensional stereophonic sound control program — doubling —
 — ***** — The computer program according to claim 15 or 16 by which the aforementioned gang control program controls the timing changed to the aforementioned predetermined background image, and the timing to which the aforementioned 3-dimensional stereophonic sound is made to output.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to game machines, such as pachinko, the control method of the game machine, a communication game system, a server, and a computer program.

[0002]

[Description of the Prior Art] For example, with a pachinko game machine, after making the display screens, such as a liquid crystal display, indicate the three patterns by change for generally reporting the shift to the great success game state which is in the advantageous game state for a game person to a game person etc., it indicates by halt in the state of having been equal to the kind with these same patterns. And the dynamic image to which a halt indication of the two patterns will be given by the time three patterns indicate by halt, and a set and one pattern which remains become the same kind from a character picture or a background image in a state change on display and the so-called reach state is displayed to show different movement from usually with a change pattern, and is directing the reach state.

[0003] The dynamic image displayed in connection with such a reach state is made as [change / the reliability of great success / with movement of a character picture or a background image], and when the dynamic image which shows specific movement is displayed, the game machine which is surely becoming it a great success also exists. Moreover, before being in a reach state, the model on which the dynamic image of different movement from usually as the omen is displayed is also.

[0004]

[Problem(s) to be Solved by the Invention] However, ** which announces great success and a reach state beforehand by the production-movement of a dynamic image in the pachinko game machine which displays a dynamic image which was described above, and the background image contained in this dynamic image were made as [show / only the monotonous movement of the grade doubled with the movement of a character picture], furthermore neither ***** music nor a sound effect was also the things relevant to a background image to under play.

[0005] That is, about the omen of great success or a reach state, it mainly could not but catch visually through the movement of a character picture, and the game

person always had to turn his eyes to the display screen, and had to be cautious of the movement of a character picture. Only by in short the movement of the character picture used as a subject being shown visually, enjoyment faded and the technical problem of the ability not to make change of an advantageous game situation perceiving effectively to a game person occurred.

[0006]

[Description of the Invention] this invention sets it as the purpose to offer the game machine which can make change of a game situation perceive effectively by it being invented under the above-mentioned circumstances and working on not only a game person's visual sense but an acoustic sense, the control method of the game machine, a communication game system, a server, and a computer program.

[0007] In order to solve the above-mentioned technical problem, the following technical means are provided in this invention.

[0008] It is the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 1st side of this invention, and the game machine characterized by having the control means to which the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes is made to output is offered.

[0009] Since according to such a game machine a dynamic image including a background image or a character picture is displayed on the display screen and a three-dimensional sound is outputted according to behavior change of the background image of this dynamic image While being able to influence simultaneously to a game person's visual sense and acoustic sense, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest can be made to be able to amplify, and a game can be enjoyed in somesthesia.

[0010] A display-control means to be the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 2nd side of this invention, and to change a background image, The game machine characterized by having a gang control means to interlock a sound output means to output sound, the 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from a sound output means, and change of a background image and change of 3-dimensional stereophonic sound is offered.

[0011] Since a gang control means interlocks change of a background image, and change of 3-dimensional stereophonic sound according to such a game machine While change of a background image and change of 3-dimensional stereophonic sound interlock and a game person's visual and auditory senses are stimulated simultaneously, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest can be made to be able to amplify, and a game can be enjoyed in somesthesia. Moreover,

by control of a gang control means, the combination of various visual stage effects and acoustic-sense-stage effects is possible, and such stage effects can be given to a game person.

[0012] according to the form of desirable operation, when reporting the omen of change of a game situation, a display-control means changes a background image to a predetermined background image — making — the movement of a background image predetermined in 3-dimensional stereophonic sound control means from a sound output means — doubling — ***** — 3-dimensional stereophonic sound [like] is made to output, and a gang control means controls the timing changed to a predetermined background image, and the timing to which 3-dimensional stereophonic sound is made to output

[0013] In case the item picture which shows beforehand change of the advantageous game situation for a game person, for example is displayed as a part of background image according to such a game machine ***** from directions to move, such as the item picture, — since 3-dimensional stereophonic sound [like] is outputted, a game person Even if it does not check an item picture etc., 3-dimensional stereophonic sound can understand immediately as an omen which indicates change of an advantageous game situation to be ******, and can have a hope.

[0014] It is the control method of a game machine of having the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 3rd side of this invention, and the control method of the game machine characterized by making the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes output is offered.

[0015] According to the control method of such a game machine, it sets, for example to a general-purpose game machine. Since a dynamic image including a background image or a character picture is displayed on the display screen and a three-dimensional sound is outputted according to behavior change of the background image of this dynamic image While being able to influence simultaneously to a game person's visual sense and acoustic sense, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest can be made to be able to amplify, and a game can be enjoyed in somesthesia.

[0016] It is the control method of a game machine of having the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 4th side of this invention, and the control method of the game machine characterized by interlocking operation to which a background image is changed, and operation which carries out output change of the 3-dimensional stereophonic sound from a sound output means is offered.

[0017] Since change of a background image and change of 3-dimensional stereophonic sound are interlocked, for example in a general-purpose game machine according to the control method of such a game machine While change of a

background image and change of 3-dimensional stereophonic sound interlock and a game person's visual and auditory senses are stimulated simultaneously, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest can be made to be able to amplify, and a game can be enjoyed in somesthesia. Moreover, with the above-mentioned gang control, the combination of various visual stage effects and acoustic-sense-stage effects is possible, and such stage effects can be given to a game person.

[0018] the timing which changes a background image to a predetermined background image when reporting the omen of change of a game situation according to the gestalt of desirable operation, and the movement of this predetermined background image -- doubling -- ***** -- the timing to which 3-dimensional stereophonic sound [like] is made to output is controlled

[0019] According to the control method of such a game machine, it sets, for example to a general-purpose game machine. for example, in case the item picture which shows beforehand change of the advantageous game situation for a game person is displayed as a part of background image ***** from directions to move, such as the item picture, -- since 3-dimensional stereophonic sound [like] is outputted, a game person Even if it does not check an item picture etc., 3-dimensional stereophonic sound can understand immediately as an omen which indicates change of an advantageous game situation to be *****, and can have a hope.

[0020] According to the 5th side of this invention, when a game person accesses a server from a terminal unit including the terminal unit of the arbitrary number which can communicate bidirectionally through a communication network between a server and this server It is the communication game system by which an imagination game machine is displayed on the display of a terminal unit, and the game by the game machine is performed based on operation of the terminal unit by the game person. The imagination display screen which displays the dynamic image which includes a background image and a character picture in a game machine at least is made to have. The communication game system characterized by preparing the control means which make the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes output to a terminal unit in a server or a terminal unit is offered.

[0021] In the terminal unit with which a game is performed, for example using communication gestalten, such as the Internet, according to such a communication game system Since a dynamic image including a background image or a character picture is displayed on the display screen and a three-dimensional sound is outputted according to behavior change of the background image of this dynamic image While being able to influence simultaneously to a game person's visual sense and acoustic sense, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest

can be made to be able to amplify, and a game can be enjoyed in somesthesia.

[0022] According to the 6th side of this invention, when a game person accesses a server from a terminal unit including the terminal unit of the arbitrary number which can communicate bidirectionally through a communication network between a server and this server. It is the communication game system by which an imagination game machine is displayed on the display of a terminal unit, and the game by the game machine is performed based on operation of the terminal unit by the game person. A display-control means to make a game machine equipped with the imagination display screen which displays the dynamic image which includes a background image and a character picture at least, and to change a background image to it. The communication game system characterized by preparing a gang control means to interlock the 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from the sound output means prepared in the terminal unit, and change of a background image and change of 3-dimensional stereophonic sound in a server or a terminal unit is offered.

[0023] Since a gang control means interlocks change of a background image, and change of 3-dimensional stereophonic sound in the terminal unit with which a game is performed, for example using communication gestalten, such as the Internet, according to such a communication game system. While change of a background image and change of 3-dimensional stereophonic sound interlock and a game person's visual and auditory senses are stimulated simultaneously, change of a game situation can be made to perceive effectively to a game person, as a result freshness and puzzlement can be memorized, interest can be made to be able to amplify, and a game can be enjoyed in somesthesia. Moreover, by control of a gang control means, the combination of various visual stage effects and acoustic-sense-stage effects is possible, and such stage effects can be given to a game person.

[0024] according to the gestalt of desirable operation, when reporting the omen of change of a game situation, a display-control means changes a background image to a predetermined background image — making — the movement of a background image predetermined in 3-dimensional stereophonic sound control means from a sound output means — doubling — ***** — 3-dimensional stereophonic sound [like] is made to output, and a gang control means controls the timing changed to a predetermined background image, and the timing to which 3-dimensional stereophonic sound is made to output.

[0025] In the terminal unit with which a game is performed, for example using communication gestalten, such as the Internet, according to such a communication game system for example, in case the item picture which shows beforehand change of the advantageous game situation for a game person is displayed as a part of background image ***** from directions to move, such as the item picture, — since 3-dimensional stereophonic sound [like] is outputted, a game person. Even if it does not check an item picture etc., 3-dimensional stereophonic sound can understand immediately as an omen which indicates change of an advantageous

game situation to be *****, and can have a hope.

[0026] According to the 7th side of this invention, communication is bidirectionally made possible through a communication network between terminal units. While having the imagination display screen which an imagination game machine is displayed on the display of a terminal unit, and displays the dynamic image which includes a background image and a character picture in the game machine at least It is the server which manages the game situation in a terminal unit that the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes is outputted, and the server characterized by having a starting means to start the predetermined function of the terminal unit according to access from a terminal unit is offered.

[0027] The dynamic image which includes a background image and a character picture in the terminal unit with which a game is performed, for example using communication gestalten, such as the Internet, according to such a server is displayed on the display screen, and in the state of the game that a three-dimensional sound is outputted according to behavior change of the background image of this dynamic image, about the function in which the malfeasance on a terminal unit is not allowed, it can restrict so that it cannot perform without the starting instruction from a server.

[0028] According to the 8th side of this invention, communication is bidirectionally made possible through a communication network between terminal units. While having the imagination display screen which an imagination game machine is displayed on the display of a terminal unit, and displays the dynamic image which includes a background image and a character picture in the game machine at least A display-control means to change a background image, and a sound output means to output sound, The 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from a sound output means, Said that a game was performed using a gang control means to interlock change of a background image, and change of 3-dimensional stereophonic sound. It is the server which manages the game situation in a terminal unit, and the server characterized by having a starting means to start the predetermined means of the terminal unit according to access from a terminal unit is offered.

[0029] In the state of the game of according to such a server change of a background image and change of 3-dimensional stereophonic sound interlocking, and stimulating the visual and auditory senses simultaneously in the terminal unit with which a game is performed, for example using communication forms, such as the Internet, about a means by which the unjust reconstruction on a terminal unit etc. is not allowed, it can restrict so that it cannot operate without the starting instruction from a server.

[0030] According to the form of desirable operation, when reporting the omen of change of a game situation, a starting means 3-dimensional stereophonic sound [like] is made to output. a display-control means is started, a background image is

changed to a predetermined background image, and 3-dimensional stereophonic sound control means are started -- making -- the movement of a background image predetermined from a sound output means -- doubling -- ***** -- The timing which is made to start a gang control means and is changed to a predetermined background image, and the timing to which 3-dimensional stereophonic sound is made to output are controlled.

[0031] ***** from the direction moved [picture / item / the] in case the item picture which shows beforehand change of the advantageous game situation for the game person who operates a terminal unit is displayed as a part of background image according to such a server, when a game is performed, for example using communication gestalten, such as the Internet, -- although 3-dimensional stereophonic sound / like / is outputted, the advantageous situation for such a game person is manageable by the server side

[0032] It is a computer program for controlling the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 9th side of this invention, and the computer program characterized by including the control program for making the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes output is offered.

[0033] According to such a computer program, operation of the game machine concerning the 1st side is realizable.

[0034] According to the 10th side of this invention, an imagination game machine is displayed on display. It is a computer program for controlling the game game by which the game by the game machine is performed based on operation by the game person. The imagination display screen which displays the dynamic image which includes a background image and a character picture in a game machine at least is made to have. The computer program characterized by including the control program for making the 3-dimensional stereophonic sound which is interlocked with change of a background image and changes output to a sound output means is offered.

[0035] According to such a computer program, operation of a game machine, a computer apparatus, etc. by which the control method of the game machine concerning the 3rd side is performed is realizable.

[0036] It is a computer program for controlling the game machine which has the display screen which displays the dynamic image which includes a background image and a character picture at least according to the 11th side of this invention. The display-control program for changing a background image, and the 3-dimensional stereophonic sound control program for making 3-dimensional stereophonic sound output from a sound output means to output sound, The computer program characterized by including the gang control program for interlocking change of a background image and change of 3-dimensional stereophonic sound is offered.

[0037] According to such a computer program, operation of the game machine concerning the 2nd side is realizable.

[0038] According to the 12th side of this invention, an imagination game machine is displayed on display. It is a computer program for controlling the game by which the game by the game machine is performed based on operation by the game person. The display-control program for making a game machine equipped with the imagination display screen which displays the dynamic image which includes a background image and a character picture at least, and changing a background image to it. The computer program characterized by including the gang control program for interlocking the 3-dimensional stereophonic sound control program for making 3-dimensional stereophonic sound output from a sound output means to output sound, and change of a background image and change of 3-dimensional stereophonic sound is offered.

[0039] According to such a computer program, operation of a game machine, a computer apparatus, etc. by which the control method of the game machine concerning the 4th side is performed is realizable.

[0040] according to the form of desirable operation, when reporting the omen of change of a game situation, a display-control program changes a background image to a predetermined background image — making — the movement of a background image predetermined in a 3-dimensional stereophonic sound control program from a sound output means — doubling — ***** — 3-dimensional stereophonic sound [like] is made to output, and a gang control program controls the timing changed to a predetermined background image, and the timing to which 3-dimensional stereophonic sound is made to output

[0041] According to such a computer program, it sets to a game machine, a computer apparatus, etc. for example, in case the item picture which shows beforehand change of the advantageous game situation for a game person is displayed as a part of background image.***** from directions to move, such as the item picture, — since 3-dimensional stereophonic sound [like] is outputted, a game person Even if it does not check an item picture etc., 3-dimensional stereophonic sound can understand immediately as an omen which indicates change of an advantageous game situation to be *****, and can have a hope.

[0042] About other features and advantages of this invention, it will become clearer from explanation of the form of implementation of invention performed to below.

[0043]

[Embodiments of the Invention] Hereafter, the form of desirable operation of this invention is concretely explained with reference to a drawing.

[0044] Drawing 1 is the outline front view of the pachinko game machine in 1 operation form of this invention. In drawing 1, the game field 2 covered with transparent boards, such as a glass plate, is established in the abbreviation Johan section of main part 1 transverse plane of a pachinko game machine. Down the bottom half section 2 of transverse-plane abbreviation of a main part 1, i.e., the game field The operation handle 3 for firing a game sphere in the game field 2 by rotation operation of a game person, Up game sphere saucer 4a for collecting the

game sphere gained when a game sphere won a prize of the winning-a-prize mouth mentioned later etc., and the game sphere which the game person borrowed, in spite of having been discharged by operation of the operation handle 3, arrive to the game field 2 — lower game sphere saucer 4b for collecting the game sphere which was not, the game sphere overflowed more from up game sphere saucer 4a to the limit is prepared. Moreover, it is the upper part of the game field 2, and the loudspeakers 5A and 5B of the couple for outputting sound are formed in the left end and right end side.

[0045] As loudspeakers 5A and 5B of the couple concerning this operation form, although a cone speaker, a dome loudspeaker, a horn loudspeaker, etc. are applicable, a parametric loudspeaker is the most desirable, for example. Here, a parametric loudspeaker is a loudspeaker which the acoustic wave of a game person's audio range can be put and outputted [loudspeaker] to a strong directive ultrasonic wave, and can centralize sound on a predetermined part like a spotlight. A parametric loudspeaker generates the acoustic wave of a game person's audio range by carrying out self-detection of the outputted ultrasonic wave using the nonlinear interaction of an acoustic wave.

[0046] The 1st display 6 for displaying two or more change patterns etc. in the game field 2, The starting mouth 7 as a winning-a-prize mouth which fluctuates the change pattern currently displayed on the 1st display 6 according to winning a prize of the game sphere discharged by operation of the operation handle 3 in the game field 2, When a game sphere wins a prize of the starting mouth 7 during change of the change pattern currently displayed on the 1st display 6, The 1st storage numeral equipment 8 for telling a game person about the information on the number of winning-a-prize game spheres as the number of times of a stock (the so-called number of holds) by luminescence, since the transaction count of a maximum of 4 batches is stocked, The 2nd display 9 for [used as the factor for determining the necessity of the operation of the equipment which usually extends an electric accessory (not shown) prepared in the entrance of the starting mouth 7] usually displaying a pattern, The gate 10 for [which usually fluctuates a pattern] being shown to the 2nd display 9 by passage of a game sphere, For example, when the change pattern by which it is indicated by change becomes the 1st display 6 with the combination which shifts to a great success game state It is wide opened by the large winning-a-prize mouth opening solenoid mentioned later, and when a game sphere wins a prize, the large winning-a-prize mouth 11 which can gain many game spheres from other winning-a-prize mouths, and the ornament lamp 12 which directs a pachinko game machine by emitting light are formed.

[0047] Drawing 2 is the circuit block diagram of the above-mentioned pachinko game machine. The bus connection of CPU20, ROM21, RAM22, and the interface circuitry 23 is carried out mutually. Input port A, output port B, game sphere launcher 3A, and the game sphere exhaust 15 are connected to an interface circuitry 23, and an interface circuitry 23 controls communication between CPUs20, these various

external circuits, or equipment to it.

[0048] The starting mouth switch 16, the specific field passage switch 17, the count switch 18, the gate switch 19, the timer switch 26, and the probability setting device 27 are connected to input port A, and these various external circuits supply a signal to CPU20 through input port A.

[0049] The 1st display 6, the large winning-a-prize mouth opening solenoid drive circuit 28, the 1st storage numeral equipment 8, the 2nd display 9, the accessory opening solenoid drive circuit 29, the 2nd storage numeral equipment 30, the ornament lamp 12, and 3-dimensional stereophonic sound generation equipment 5 are connected to output port B, and the control signal from CPU20 is supplied to these various external circuits or equipment.

[0050] Large winning-a-prize mouth opening solenoid 28a for being controlled by CPU20, and driving, and opening and closing the large winning-a-prize mouth 11 is connected to the large winning-a-prize mouth opening solenoid drive circuit 28. It is controlled by CPU20, and drives in the accessory opening solenoid drive circuit 29, and accessory opening solenoid 29a for extending the entrance of the starting mouth 7 is connected to it by usually operating an electric accessory. Loudspeakers 5A and 5B are connected to 3-dimensional stereophonic sound generation equipment 5.

[0051] CPU20 operates based on the program stored in ROM21, generates an output signal according to the detecting signal from various kinds of switches inputted through input port A etc., and supplies it to various kinds of display, solenoid drive circuits, etc. through output port B.

[0052] The program for operating CPU20, the data of fixation decided beforehand are stored in ROM21. Especially, indicative datas displayed on the 1st display 6, such as a change pattern and a dynamic image, and the program for controlling display processing based on these indicative datas are included in this ROM21. although the background of a character picture is made the character picture which a gap and a reach state look great success - like [the indicative data of a dynamic image], respectively, responds to it, and shows peculiar movement, and usually, the background image (omen picture) which occasionally shows the movement as an omen of a reach state is contained According to the background image which shows such an omen, movement which a wind blows suddenly, for example, and movement in which an item different from a character picture appears suddenly are seen. furthermore, ***** from the direction which ***** and an item picture move as the wind is blowing on it suddenly in case a background image shows the movement as an omen of a reach state to ROM21 for example, — sound data, a program, etc. for generating 3-dimensional stereophonic sound [like] are memorized

[0053] RAM22 provides CPU20 with a work area, and memorizes various kinds of variable datas temporarily. For example, RAM22 memorizes temporarily the random number which was generated in order to determine whether to be great success, and

was chosen, when a game sphere wins a prize of the starting mouth 7 and the starting mouth switch 16 detects a game sphere. Moreover, the reach pattern history storage region is set to RAM22, and the dynamic image which consists of the character picture and background image which were chosen for the reach pattern, i.e., reach production, is stored in this reach pattern history storage region.

[0054] The starting mouth switch 16 detects the game sphere which won a prize of the starting mouth 7, and supplies a detection signal to CPU20.

[0055] The specific field passage switch 17 is installed in the interior of the large winning-a-prize mouth 11, is for detecting that the game sphere passed through the specific field, and supplies a detection signal to CPU20. This specific field passage switch 17 makes the large winning-a-prize mouth 11 open wide again after synziesis of the large winning-a-prize mouth 11 by a game sphere's winning a prize of the large winning-a-prize mouth 11, and passing through a specific field at the time of opening of the large winning-a-prize mouth 11 by large winning-a-prize mouth opening solenoid 28a.

[0056] The count switch 18 is for detecting the game sphere which won a prize of the large winning-a-prize mouth 11, and counting the number of winning a prize of the game sphere to the large winning-a-prize mouth 11 between 1 cycles from opening of the large winning-a-prize mouth 11 by large winning-a-prize mouth opening solenoid 28a to closing. This count switch 18 supplies a detection signal to CPU20.

[0057] The gate switch 19 is a thing for [which usually indicates the pattern by change] detecting the game sphere which passes through the gate 10, and being displayed on the 2nd display 9. This gate switch 19 supplies a detection signal to CPU20.

[0058] The timer switch 26 detects the game sphere which won a prize of the starting mouth 7 like the starting mouth switch 16, and supplies a detection signal to CPU20. Based on the detection signal from this timer switch 26, the timer (not shown) attached to CPU20 clocks the elapsed time from the time of winning a prize of the starting mouth 7 at the end. And CPU20 shortens the display time of the dynamic image for reach production, when the number of holds of the winning-a-prize sphere of the starting mouth 7 is 3 or 4.

[0059] The probability setting device 27 is for making a setting change of the probability of generating great success.

[0060] The 1st display 6 consists for example, of liquid crystal display equipment, is controlled by CPU20, and after it indicates two or more patterns by change, it indicates by halt. Moreover, the 1st display 6 displays the dynamic image which combines with a change pattern and consists of a character picture and a background image.

[0061] The 1st storage numeral equipment 8 is for consisting of four light emitting diodes, being controlled by CPU20, and reporting the number of holds of change pattern starting to a game person visually. That is, since the transaction count of a

maximum of 4 batches is stocked when a game sphere wins a prize of the starting mouth 7, the 1st storage numeral equipment 8 tells a game person about the information on the number of winning-a-prize game spheres as the number of times of a stock (the so-called number of holds) by luminescence at a game person.

[0062] The 2nd display 9 consists for example, of liquid crystal display equipment, is controlled by CPU20, and displays the common pattern used as the factor which determines the necessity of the operation of the equipment which usually extends an electric accessory prepared in the entrance of the starting mouth 7.

[0063] Although the 2nd storage numeral equipment 30 is not illustrated, it is for consisting of four light emitting diodes, for example, being controlled by CPU20, and usually reporting the number of holds of pattern starting to a game person visually. That is, the 2nd storage numeral equipment 30 tells the information on the number of winning-a-prize game spheres made into the number of times of a stock (the so-called number of holds) at a game person since a maximum of four batches of transaction counts of a pattern are usually stocked by what a game sphere passes through the gate 10 by luminescence.

[0064] A main part 1 is directed by the ornament lamp's 12 consisting of much light emitting diodes, and being controlled by CPU20, and switching on the light and putting out the light, namely, emitting light.

[0065] 3-dimensional stereophonic sound generation equipment 5 is for generating voice in false from the virtual source in the installation position of the loudspeakers 5A and 5B of a couple, and a different position, and has DSP (digital signal processor). 3-dimensional stereophonic sound generation equipment 5 can be carried out [sound / from which the effect of the sound effect as 3-dimensional stereophonic sound from a virtual source, i.e., a binaural sound, produces the sound data which are controlled by CPU20, and drive, for example, are memorized by ROM21], and can be generated.

[0066] Here, the sound which the effect of a binaural sound makes means the sound in which depth and a breadth are impressed to a game person. The sound which the effect of this binaural sound makes can be obtained by outputting sound based on the correspondence number which generates sound. Or after performing processing to which the correlation of the sound pressure of the sound in the entrance of both the game person's ears is changed, processing which adds the correspondence number which generates reverberation sound as opposed to the sound data used as this correspondence number, it can obtain by outputting sound based on the correspondence number which performed processing.

[0067] Moreover, a virtual source means an imagination sound source which is produced in a game person's feeling and which exists in a position which is different in Loudspeakers 5A and 5B with the sound outputted from Loudspeakers 5A and 5B. Therefore, if the sound which generates a virtual source is outputted and a virtual source is generated behind a game person by Loudspeakers 5A and 5B when the game person is located in the transverse plane of a game machine, a game person

will sense as if sound was outputted from the virtual source generated back, in spite of outputting sound from the loudspeakers 5A and 5B at a transverse plane. That is, it means that the virtual source had occurred in a different position from Loudspeakers 5A and 5B in a game person's feeling.

[0068] The sound which the effect of the binaural sound concerning this operation gestalt makes the sound which generates the above-mentioned virtual source — it is — for example, close to his ears [of a game person] — ***** — it being made like or Since it is made for sound to approach gradually close to his ears [of a game person] or a game person can be made to know a game situation using unique and new methods, such as making it sound turn around a game person etc. While being able to give a feeling of an upsurge to a game person, the hope and the degree of excitement in game advance can be raised further.

[0069] The acoustic wave from Loudspeakers 5A and 5B results in the eardrum of both the game person's ears in response to an operation with the transfer system of places, such as an amusement center and space, in which for example, a game person is, and the transfer system by reflection of a game person's head, a concha, a shoulder, etc., diffraction, and resonance. The transfer function of these transfer systems, i.e., the transfer function from a sound source to external auditory meatus, is called a head sound transfer function. This head sound transfer function can be acquired with measuring methods, such as an M sequences method and the cross-spectrum method.

[0070] The above-mentioned virtual source can be processed in sound data or a correspondence number, and can make it generate using the head sound transfer function acquired according to the physical relationship of a game person and Loudspeakers 5A and 5B, the physical relationship of a game person and a virtual source, etc. by outputting the sound based on this sound data or a correspondence number. It is possible to perform the above-mentioned processing by DSP etc., for example, it can realize by using an FIR (finite-duration impulse response) filter, an IIR (infinite-duration impulse response) filter, etc.

[0071] It becomes possible to generate a virtual source by specifically setting up the frequency characteristic of the sound outputted by the virtual source, performing processing using predetermined relational expression to the signal or sound data made to generate the sound of this frequency characteristic, changing into the signal or sound data made to generate the sound of the above-mentioned frequency characteristic, and outputting it from Loudspeakers 5A and 5B, respectively.

[0072] Moreover, when sound is generated from a virtual source by the above-mentioned method and a cross talk arises, the generating can be suppressed by performing processing which negates the above-mentioned cross talk to the correspondence number which generates the sound outputted by Loudspeakers 5A and 5B.

[0073] The correspondence number or sound data outputted from Loudspeakers 5A and 5B can be obtained by preparing beforehand the sound data which specifically

serve as the source of the sound outputted from a virtual source, and processing this sound data using the filter which has the predetermined frequency characteristic. Usually, this processing is called binaural conversion. In addition, what is necessary is for DSP just to realize other filters corresponding to the movement, in order to move the above-mentioned virtual source.

[0074] In addition, the above-mentioned sound data are memorized by ROM21.

Moreover, the sound data memorized by ROM21 may memorize the sound data which do not necessarily need to be sound data made to generate altogether the sound which the effect of a binaural sound makes, and are made to generate the sound which especially the effect of a binaural sound does not produce. Moreover, as for the sound data made to generate the sound which the effect of a binaural sound makes, it is desirable that it is sound data made to generate a virtual source. Furthermore, when the sound data with which ROM21 serves as sound which generates a virtual source are memorized, as for this sound data, it is desirable that it is sound data linked to the above-mentioned dynamic image.

[0075] Game sphere launcher 3A is controlled by CPU20, and when a game person does rotation operation of the operation handle 3, it fires a game sphere in the game field 2.

[0076] The game sphere exhaust 15 is controlled by CPU20, and when a game sphere wins a prize of the starting mouth 7 or the large winning-a-prize mouth 11, it pays out two or more game spheres to up game sphere saucer 4a or lower game sphere saucer 4b.

[0077] That is, Loudspeakers 5A and 5B have realized a sound output means to output sound.

[0078] 3-dimensional stereophonic sound generation equipment 5 has realized the 3-dimensional stereophonic sound control means to which 3-dimensional stereophonic sound is made to output from a sound output means.

[0079] CPU20 has realized a gang control means to interlock a display-control means to change a background image, and change of a background image and change of 3-dimensional stereophonic sound.

[0080] Next, the outline of the whole operation is explained.

[0081] If a game person grasps the operation handle 3 and makes it rotate in the predetermined direction more than a predetermined angle, a manipulate signal will be supplied to CPU20 from game sphere launcher 3A. Thereby, a control signal is supplied to game sphere launcher 3A from CPU20, and a game sphere is discharged by game sphere launcher 3A in the game field 2.

[0082] If the game sphere which reached in the game field 2 falls with gravity and wins a prize of the starting mouth 7, colliding with a nail etc., the game sphere will be detected by the starting mouth switch 16, and a detection signal will be supplied to CPU20 from the starting mouth switch 16. Thereby, CPU20 controls the 1st display 6 and the pattern is indicated by change. Furthermore, CPU20 determines whether to be great success by the well-known method using probability. For example,

CPU20 makes the sampling equipment outside drawing sample the random number generated by the random-number-generation equipment outside drawing, compares the contents of the table stored in the sampled numeric value and ROM21, and it decides whether to be great success.

[0083] A halt indication of two of three patterns by which it is indicated by change at the 1st display 6 is given, and when it is the kind with these two [same], generally this is called reach state. In this reach state, as the 1st display 6 is controlled by CPU20, for example, it is shown in drawing 3, after the pattern (inside of drawing "7" number) of a left end and middle has been in agreement, it stops, and a right end pattern will still be in a state change on display. at this time, the character picture by animation is expressed with the front face of the background image, for example like a still picture as a dynamic image, and the character picture is [a pattern] subject to change — it is — the various kinds of making it move etc. — colorful production is made visually In addition, the pattern by which it is indicated by change at the 1st display 6 consists of ten numerical patterns "0" — "9" Becoming and other patterns, and during a change display, it is in sight as these patterns are scrolling to lengthwise at high speed.

[0084] Two or more kinds of a series of dynamic images displayed on the display screen of the 1st display 6 in a reach state are prepared, and by whether the dynamic image of which kind is displayed, the reliability which is becoming it a great success could predict them to the game person, and has come them.

[0085] On the other hand, in great success, the change pattern displayed on the display screen of the 1st display 6 stops in the state where it was equal to the three same patterns (for example, the Zorro eye "777"), through for example, the reach state. Thereby, great success is reported to a game person.

[0086] If it becomes such great success, CPU20 will control large winning-a-prize mouth opening solenoid 28a through the large winning-a-prize mouth opening solenoid drive circuit 28, and the large winning-a-prize mouth 11 will be opened wide. And if a game sphere wins a prize of the large winning-a-prize mouth 11, the count switch 18 will detect a game sphere and will supply a detection signal to CPU20. Thereby, CPU20 controls the game sphere exhaust 15, for example, up game sphere saucer 4a or lower game sphere saucer 4b is made to pay out 15 game spheres. And when the game sphere which 30 seconds have passed since the opening time of the large winning-a-prize mouth 11, or won a prize of the large winning-a-prize mouth 11 amounts to ten pieces, CPU20 controls large winning-a-prize mouth opening solenoid 28a through the large winning-a-prize mouth opening solenoid drive circuit 28, and the large winning-a-prize mouth 11 is made to close.

[0087] Moreover, when the game sphere which won a prize of the large winning-a-prize mouth 11 passes through the specific field established in the interior of the large winning-a-prize mouth 11, the specific field passage switch 17 detects a game sphere, and supplies a detection signal to CPU20. Thereby, CPU20 makes the large winning-a-prize mouth 11 open wide again, after the large winning-a-prize mouth 11

is closed. Therefore, a game person can perform a game, after opening of the large winning-a-prize mouth 11 has continued substantially, and he can gain a lot of game spheres. However, re-opening of the large winning-a-prize mouth 11 is not performed without any restriction, for example, it limits to 16 times. That is, a game person plays a game under the open state of a maximum of 16 rounds, when from one opening of the large winning-a-prize mouth 11 to closing is considered as one round. Such a game state is called great success game state.

[0088] The game sphere which did not win a prize is discharged by the exterior of the game field 2 from the out mouth outside drawing.

[0089] Although an above-mentioned reach state and an above-mentioned great success game state can be called state advantageous to a game person, according to the control whose CPU20 decides whether to be great success using probability, compared with the case where the direction whose kind of three patterns by which it is indicated by change does not correspond is in agreement, many can be told to the 1st display 6 probable. It separates from the state where such three patterns are not in agreement, and is called a-state. In this blank state, as the 1st display 6 is controlled by CPU20, for example, it is shown in drawing 4, the patterns of ** stopped after the pattern (inside of drawing "6" number) of middle and a right end has been in agreement, and a left end shall differ. Of course, a kind with all respectively different patterns may be shown.

[0090] also in such a blank state, the character picture by animation expresses with the front face of the background image, for example like a still picture as a dynamic image -- having -- the movement of the character picture -- various kinds -- colorful production is made visually By the way, even if it will be in a blank state, when there is a winning-a-prize game sphere as a suspended part which it is at the time and already won a prize of the starting mouth 7, CPU20 is beforehand decided in advance of the change display of a pattern for whether it is great success about a part for the hold. And in case CPU20 displays the dynamic image corresponding to a blank state, as occasionally shown in drawing 4, it displays suddenly the item picture which indicates another behavior change to be a character picture in a background image (near [as an example] the lower left of the change pattern of middle). This item picture shows indirectly the omen which will be in a reach state soon to a game person.

[0091] ***** from [of the item picture in the display screen in case such an item picture is displayed, when CPU20 controls 3-dimensional stereophonic sound generation equipment 5] movement -- 3-dimensional stereophonic sound [like] is generated through Loudspeakers 5A and 5B Thereby, a game person not only catches an item picture visually, but can catch a sound effect which moves according to the movement of an item picture through Loudspeakers 5A and 5B, and he can sense the reach state and the bird clapper soon.

[0092] Hereafter, the control processing about the display screen and sound output is explained. In addition, in the following procedure, although any sound other than

the sound linked to a dynamic image is not indicated, suppose that BGM, a sound effect, voice, etc. are outputted suitably according to a game situation.

[0093] Drawing 5 is a flow chart explaining the procedure of the control processing about the display screen and sound output.

[0094] First, CPU20 judges whether the game sphere won a prize of the starting mouth 7 (S1). As for the winning-a-prize sphere in this judgment, a suspended part is also contained.

[0095] If the game sphere has won a prize of the starting mouth 7 (S1:YES), CPU20 will control the 1st display 6 and will make the display of a change pattern start (S2).

[0096] Next, CPU20 casts lots in great success (S3). This lottery result is stored temporarily at RAM22. In addition, a suspended lottery result is made into the state where it already decided before the pattern change display start about a part for the hold.

[0097] In the case of a blank (S4:YES), CPU20 displays all or some change patterns on the 1st display 6 as an inharmonious state as a result of a lottery (S5). A blank for which " said here understands a game person as it immediately, without gap" passing a reach state is meant. However, CPU20 is in any of "" to which great success" and " which passed through the reach state do not pass through gap" and a reach state is a gap" lottery results are, and the state where it has recognized, at this time.

[0098] Moreover, CPU20 displays the dynamic image corresponding to the blank state on the 1st display 6 (S6). Incidentally, the dynamic image is displayed in the mode according to those situations also in the situation without winning a prize of a game sphere, or the situation that the game is not performed.

[0099] In case the dynamic image corresponding to the blank state is displayed, CPU20 judges whether it is that by which the lottery result [finishing / part / suspended / decision] existed in RAM22, and the lottery result was planned as a reach state (S7).

[0100] When the lottery result planned as a reach state exists (S7:YES), although CPU20 displays the dynamic image corresponding to the blank state, it indicates the item picture by appearance into the background image which constitutes the dynamic image (S8).

[0101] ***** from the direction which an item picture moves when CPU20 controls 3-dimensional stereophonic sound generation equipment 5 during the display of such an item picture — 3-dimensional stereophonic sound [like] is made to output through Loudspeakers 5A and 5B, and this routine is ended (S9) and after that That is, a game person can have such a hope that next a reach state may come, a ***** case, taking in the omen which will be in a reach state through an acoustic-sense-phenomenon, and enjoying visual and the stage effects by a display or the sound effect as if an item picture appears and the item picture moved with the virtual source through 3-dimensional stereophonic sound into the background image, even if it will be in a blank state. In addition, it is left to probable processing

of CPU20 whether an item picture is displayed and 3-dimensional stereophonic sound is made to output. Therefore, even if the lottery result planned as a reach state exists, neither the display of an item picture nor the output of 3-dimensional stereophonic sound is always performed.

[0102] In S7, if the lottery result planned as a reach state does not exist (S7:NO), CPU20 ends this routine.

[0103] In S4, if it passes through great success or a reach state, when considering as a gap as a result of a lottery (S4:NO), these change patterns are displayed on the 1st display 6 as a reach state which was made to give a halt indication of CPU20 in the state where two change patterns were made in agreement, and still made other one change pattern under the change display (S10).

[0104] At this time, CPU20 displays the dynamic image corresponding to the reach state on the 1st display 6 (S11).

[0105] Furthermore, while giving a halt indication of CPU20 in the state where all change patterns were made in agreement (S13) and generating a great success state based on the already obtained lottery result in great success (S12:YES), the dynamic image corresponding to the great success state is displayed on the 1st display 6 (S14). However, when the already obtained lottery result is not great success (S12:NO), CPU20 progresses to S5.

[0106] After generating a great success state, CPU20 shifts to a great success game state (S15), and ends this routine.

[0107] In S1, if the game sphere has not won a prize of the starting mouth 7 including a suspended part, either (S1:NO), CPU20 waits to return to S1 and for a game sphere to win a prize of the starting mouth 7.

[0108] Therefore, according to the above-mentioned pachinko game machine, corresponding to the change pattern great success state - indicates a gap state and a reach state to be, the dynamic image which consists of a character picture which achieves visual stage effects, or a background image is displayed. moreover -- the time of the item picture which shows that a reach state comes soon as an omen phenomenon being displayed in a background image, even if it changed into the blank state, and moreover an item picture being displayed -- the movement of the item picture -- doubling -- ***** from right-and-left upper-and-lower-sides order - - 3-dimensional stereophonic sound [like] is outputted

[0109] Therefore, expecting a reach state and a great success state according to the movement of a character picture, by being influenced by a visual sense and the acoustic sense by the 3-dimensional stereophonic sound accompanying the item picture and it which appear suddenly in a background image, a game person can memorize freshness and puzzlement, and a hope can be made to be able to amplify him, and it not only enjoys a game, but he can enjoy a game in somesthesia.

[0110] Drawing 6 is the outline block diagram of the communication game system in 1 operation form of this invention. This communication game system is equipped with the server 31, the terminal unit 32 of an arbitrary number, and the

communication network 33. The management entrepreneur to whom management was commissioned has managed the server 31 from the management entrepreneur or its management entrepreneur of a communication game system, and the mass storage system etc. is attached. A terminal unit 32 is for example, a game person's personal computer, home video game equipment, a handheld game machine, or carried type telephone equipment, and is accessible to a server 31 through a communication network 33. Communication networks 33 are the aggregates by the cable or radio, such as a public communication channel network and the Internet. Of course, a terminal unit 32 may be connected to a communication network 33 through LAN. However, the terminal unit 32 has equipped the loudspeaker for at least two channels and presupposes that the output of 3-dimensional stereophonic sound is constituted possible to satisfy the requirements for application of this invention.

[0111] In this communication game system, the executive program for performing a communication game beforehand, for example to a game person is distributed by the above-mentioned management entrepreneur or the management entrepreneur through record media, the Internet, etc., such as CD-ROM, and will be in the state in which a game is possible by installing the above-mentioned executive program in the self terminal unit 32. In addition, the program for performing the sound data (the sound data made to generate the sound which produces the effect of a binaural sound being included) for outputting to the image data for displaying on the display screen other than the above-mentioned executive program and the loudspeaker of a terminal unit 32, and communication with a server 31 etc. is recorded on the record medium. A game person accesses a server 31 from the self terminal unit 32 through the above-mentioned executive program. According to it, a server 31 sends an invocation command to a terminal unit 32.

[0112] A terminal unit's 32 reception of an invocation command displays the image of the portion of the pachinko game machine concerning the operation form which carried out point ** which is equivalent to the game field 2 at least on the display screen section of the terminal unit 32. If it puts in another way, an imagination pachinko game machine etc. will be created by the display screen section of a game person's terminal unit 32. And this imagination pachinko game machine etc. performs the same operation as the operation form which carried out point ** based on the above-mentioned executive program.

[0113] In this case, after pushing key switches, such as a mouse of a terminal unit 32, or a keyboard, and setting up the strength of discharge of an imagination game sphere instead of a game person being the operation handle 3, even if it does not continue pushing a key switch, an imagination game sphere may be made to be discharged. Moreover, an imagination game sphere may be made to be discharged instead of a game person being the operation handle 3 a condition [continuing pushing key switches, such as a mouse of a terminal unit 32, or a keyboard,].

[0114] Based on the strength of discharge of the game sphere set up by for example,

the game person, the movement is determined at random by CPU by which the terminal unit 32 was equipped with the imagination game sphere in the portion equivalent to the game field 2. And CPU distinguishes that detected the movement of an imagination game sphere based on the coordinate set up in the portion equivalent to the game field 2, for example, the game sphere won a prize of a winning-a-prize mouth.

[0115] However, about operation which is not allowed the malfeasance on a terminal unit 32 or reconstruction of generating a reach state and a great success state etc., it is desirable for a server 31 to process on real time. Of course, it restricts, when performing a game, and you may make it transmit the program for performing a pachinko game to a terminal unit 32 through a communication network 33 from a server 31. In this case, the program for a terminal unit 32 performing a pachinko game instead of a server 31 will be performed. Furthermore, you may be made to perform the program for performing a pachinko game, transmitting a part of program for performing a pachinko game to a terminal unit 32 through a communication network 33 from a server 31, and exchanging various kinds of data and information on real time between a server 31 and a terminal unit 32.

[0116] Moreover, though indicative datas and sound data, such as a dynamic image, are outputted by it being installed in a terminal unit 32 with the program for performing a pachinko game, and being called at any time from a server 31 according to a game situation, they are good. Or indicative datas and sound data, such as a dynamic image, are prepared for the server 31, and streaming processing is performed between a server 31 and a terminal unit 32, and a server 31 transmits an indicative data and sound data to a terminal unit 32, and you may make it make it output to it each time. When there is no function equivalent to the 3-dimensional stereophonic sound generation equipment 5 which carried out point ** in a terminal unit 32, a server 31 transmits to a terminal unit 32, and you may make it make the sound data which it finished preparing as 3-dimensional stereophonic sound output.

[0117] In addition, this invention is not a limiting to each above-mentioned operation form thing.

[0118] Unlike special-purpose machinerys, such as the above-mentioned pachinko game machine, this invention is applicable also to a general-purpose game machine (an equipped with liquid crystal screen carrying type thing, and thing which projects a game screen on a television receiver). According to this, idea nature can be raised by displaying the same game production screen as a pachinko game machine on the display screen.

[0119] this invention is applicable not only to a pachinko game machine but slot machines, such as a pachislot game machine equipped with LCD etc. That is, on a slot machine, it can also be called the reach state of a pachinko game machine, for example, the state where the bonus flag was materialized occurs internally. in order to notify a game person of the formation state of such a bonus flag, even if it shifts during flag formation, the item picture which shows that the bonus flag is

materialized displays in a background image — having — the movement of this item picture — doubling — ~~*****~~ from right-and-left upper-and-lower-sides order — 3-dimensional stereophonic sound [like] is outputted According to this, a game person can perceive that a great success state will surely come if a stop button is pushed with sufficient timing by the 3-dimensional stereophonic sound accompanying an item picture and it. And by being influenced by a visual sense and the acoustic sense by the 3-dimensional stereophonic sound accompanying the item picture and it which appear suddenly, freshness and puzzlement can be memorized, a hope can be made to be able to amplify and a pachislot game can be enjoyed in somesthesia.

[0120] Although carried out to displaying an item picture as an omen of a reach state, and making 3-dimensional stereophonic sound output in connection with it with the above-mentioned operation form, you may be made to perform the display of an item picture, and the output of 3-dimensional stereophonic sound, for example as an omen of a great success state. The timing which performs the display of an item picture and the output of 3-dimensional stereophonic sound can be suitably set up according to histories, such as not only under the display of the dynamic image corresponding to the blank state but time conditions, and a lottery result.

[0121] Moreover, where a character picture and a change pattern are left as it was also besides displaying an item picture as an omen of a great success state, you may carry out scrolling or changing the whole background image etc.

[0122] Moreover, although especially the mode of operation at the time of displaying the dynamic image corresponding to the reach state, the great success state, etc. was not explained in full detail, you may make it make 3-dimensional stereophonic sound output according to movement, such as a character picture included in a dynamic image, also at this time. Of course, you may make it make 3-dimensional stereophonic sound output according to the movement of a background image also in a situation without winning a prize of a game sphere, or the situation that the game is not performed.

[0123] Three or more loudspeakers 5A and 5B may be installed not only in the right-and-left couple. The position of each loudspeakers 5A and 5B may not be in the physical relationship which separated comparatively like the above-mentioned operation form, as long as a game person can catch 3-dimensional stereophonic sound, i.e., the sound which the effect of a binaural sound makes.

[0124] kana, others, for example, the kanji, animals and plants, the character of animation, and mah-jongg — a tile, an emblem, or a map may be what pattern [number / as shows a change pattern to drawing 3 and drawing 4] Moreover, the change pattern not only of three but its number may be arbitrary, and may be three or more.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the outline front view of the pachinko game machine in 1 operation gestalt of this invention.

[Drawing 2] It is the circuit block diagram of the pachinko game machine shown in drawing 1.

[Drawing 3] It is explanatory drawing showing the example of the display screen in a reach state.

[Drawing 4] It is explanatory drawing showing the example of the display screen in a blank state.

[Drawing 5] It is a flow chart explaining the procedure of the control processing about the display screen and sound output.

[Drawing 6] It is the outline block diagram of the communication game system in 1 operation gestalt of this invention.

[Description of Notations]

1 Main Part of Pachinko Game Machine

2 Game Field

5 3-dimensional Stereophonic Sound Generation Equipment

5A, 5B Loudspeaker

6 1st Display

7 Starting Mouth

11 Large Winning-a-Prize Mouth

20 CPU

21 ROM

22 RAM

31 Server

32 Terminal Unit

33 Communication Network

[Translation done.]

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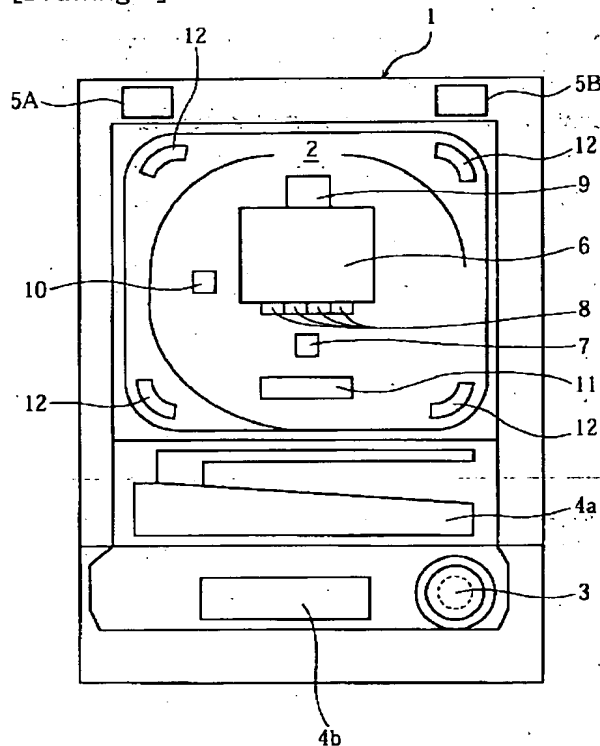
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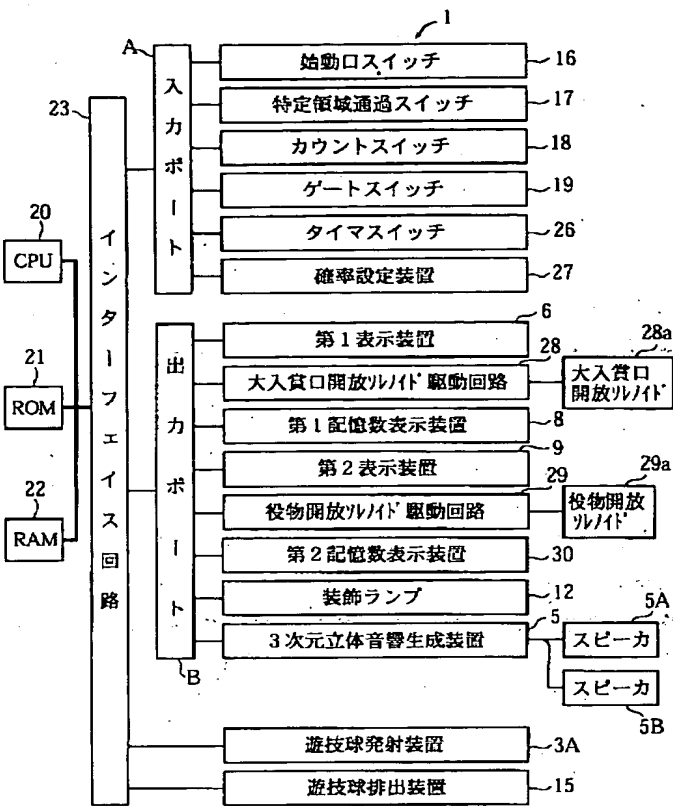
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DRAWINGS

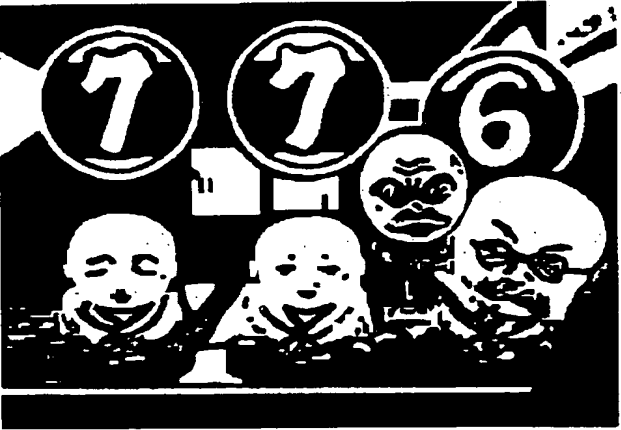
[Drawing 1]



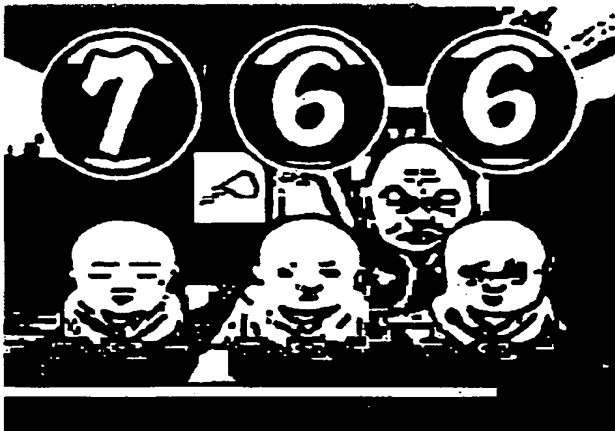
[Drawing 2]



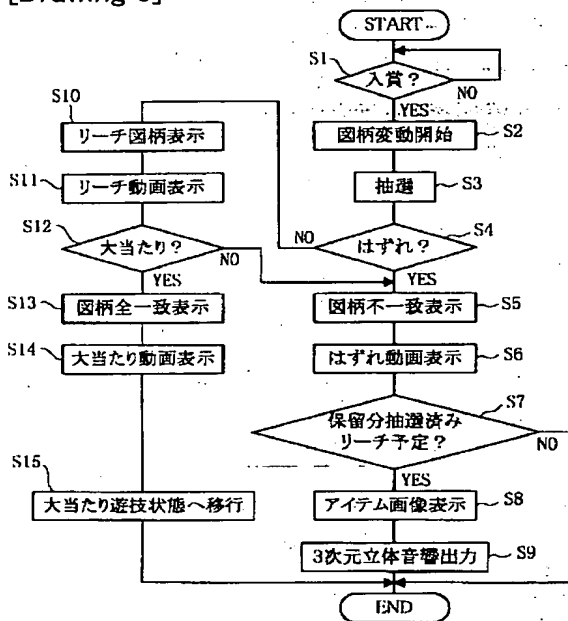
[Drawing 3]



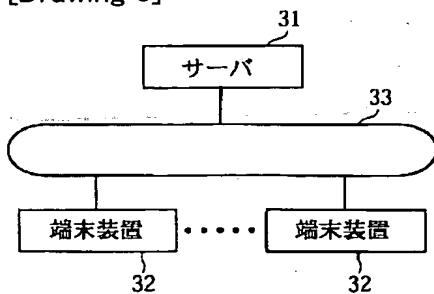
[Drawing 4]



[Drawing 5]



[Drawing 6]



[Translation done.]